

IN THE SPECIFICATION:

On page 1, before the paragraph beginning on line 4 with the phrase "The invention relates", please insert the following heading, underlined and centered on the page:

--TECHNICAL FIELD OF THE INVENTION--

On page 1, before the paragraph beginning on line 10 with the phrase "Unwanted plant growth", please insert the following heading, underlined and centered on the page:

--BACKGROUND OF THE INVENTION--

Please amend the paragraph beginning on page 1, line 7 and ending on page 2, line 7, as follows:

--Isopentyl diphosphate (IPP) is the branching point from which the widest range of isoprenoids are formed. The production of IPP is therefore a critical point in plant metabolism. In plants, IPP is produced via two different metabolic pathways in different compartments. In the endoplasmic reticulum (ER) and in the cytosol, IPP synthesis proceeds via the classic acetate/mevalonate metabolic pathway as it also proceeds in the animal organism. In contrast, IPP is synthesized in chloroplasts via the alternative glyceraldehyde phosphate/pyruvate metabolic pathway. Both metabolic pathways are essential since various isoprenoid metabolites are formed in the different compartments. Moreover, the degree to which the two metabolic pathways are autonomous or to which an exchange of metabolites takes place between the compartments has not been elucidated as yet (Heintze et al., 1990, Kleinig, 1989). (See References section below for full citation to these and other references referred to herein).--

On page 2, before the paragraph beginning on line 18 with the phrase "Within the context", please insert the following heading, underlined and centered on the page:

--SUMMARY OF THE INVENTION--

Please amend the paragraph beginning on page 2, line 24 and ending on page 3, line 10 as follows:

--The homology between the *Saccharomyces cerevisiae* PMVK (= ERG8) and the cDNA isolated from *A. thaliana* amounts to 44% similarity or 35% identity (see Fig. 1, Bestfit with Wisconsin Package Version 10.1). (ERG8 is the name of the gene encoding phosphomevalonate kinase in yeast (*S. cerevisiae*)). This corresponds for example to the homology between the *Saccharomyces cerevisiae* mevalonate kinase and the *Arabidopsis thaliana* mevalonate kinase with a similarity of 45% and an identity of 35%. The function was detected for the *Arabidopsis thaliana* mevalonate kinase by complementation of the corresponding mutant from *Saccharomyces cerevisiae*. Moreover, the cDNA isolated within the context of the present invention shows 69% identity with a partial PMVK sequence from *Pinus radiata* in accordance with SEQ ID NO:5, which is of interest for modifying the isoprenoid content, isoprenoid composition and isoprenoid metabolism of plants (WO 00/36 081). Further partial cDNAs from plants (*Medicago trunculata*, Accession Number AA660847, see SEQ ID NO:3 and *Gossypium hirsutum*, Accession Number AI727861, see SEQ ID NO:4) have been isolated as putative PMVKs. Various *Arabidopsis* spp. sequences (ESTs and genomic sequences) which correspond to the PMVK sequence isolated herein or to parts thereof can be found in databases from various sequencing projects, however, no information is given on the function or importance of these sequences or sequence fragments.--

On page 3, after the paragraph ending on line 28 with the phrase "fragments thereof." Please insert the following:

--BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a determination of the homology between the *A. thaliana* phosphomevalonate kinase according to the invention in accordance with SEQ ID NO:2 and the known *S. cerevisiae* phosphomevalonate kinase (BESTFIT) by means of Bestfit (Wisconsin Package Version 10.1 (GCG)). The similarity is 44% and the identity 35%.

SEQ ID NO:1 Nucleic acid sequence encoding *A. thaliana* phosphomevalonate kinase.

SEQ ID NO:2 Amino acid sequence of the *A. thaliana* phosphomevalonate kinase.

SEQ ID NO:3 Nucleic acid fragment from *Medicago trunculata* (putative PMVK) of Accession Number AA 660847.

SEQ ID NO:4 Nucleic acid fragment from *Gossypium hirsutum* (putative PMVK) of Accession Number AI 727861.

SEQ ID NO:5 Nucleic acid fragment from *Pinus radiata* (encoding PMVK in accordance with WO 00/36081).--

On page 3, before the paragraph beginning on line 30 with the phrase "The nucleic acids", please insert the following heading, underlined and centered on the page:

--DETAILED DESCRIPTION OF THE PREFERRED
EMBODIMENTS OF THE INVENTION--

On page 18, as the first line before the phrase "Example 1", please insert the following heading, underlined and centered on the page:

--EXAMPLES--.

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